

Goldilocks & the Three Bears

This story lends itself to multiple engineering aspects, and a few are listed below. The level at which a teacher develops this within the classroom will, obviously, depend on the age and ability of the students.



The student's first task would usually be **identifying a need**. There are a few suggestions for this, or students may list their own based on what they notice in the story. The examples below are just samples of needs that the children may identify.

- How would the bears know when someone was in their house? Design an alarm system that would help them with this.
- How could Baby Bear's chair be made stronger? Compare and contrast various illustrations and decide which shape it was. Identify whether it was a 3 legged stool or a 4 legged chair. (Can carry out the 3 legged design activities to discuss stability issues).
- How can Goldilocks escape safely from the bear's house? Children will design a system that allows her to leave the bedroom without being caught by the bears. E.g A slide or a trampoline

As Bears hibernate, design a room in the house for the bears to use.

The next step would be **research**. This has already been discussed in the Assessment of baby bear's chair, but could also incorporate research into the Strength, properties and usage of different materials.

The research component is often involved before the communicating of an idea in order to develop the best possible solution, but it may be brought in later to inform and modify the initial idea.

This component involves many of the skills that are being taught in Language Arts, Science and Social Studies. As with other research areas, it is helpful to the children if a graphic organizer format can be used for Engineering Technology research.

After identifying a need and carrying out research, we move on to **developing and communicating ideas**. This is a critical part of the design process. Communication covers a wide range of possibilities including pictorial representations, written reports, accurate engineering drawings and modeling. Successful communication occurs when a designer has managed to share an idea with others in such a way that they understand his design idea. One great way for children to communicate their design is through the use of a prototype.

Thinking Skills:

As touched upon earlier, through the years, Bloom's Taxonomy has given rise to educational concepts including terms such as high and low level thinking. It has also been closely linked with multiple intelligences (Noble, 2004) problem solving skills, creative and critical thinking, and more recently, technology integration. Using the Revised Taxonomy in an adaptation from

the Omaha Public Schools Teacher's Corner, a lesson objective based upon the story of Goldilocks and the Three Bears is presented for each of the six levels of the Cognitive Process as shown on the **Revised Taxonomy** Table.

Remember:	Describe where Goldilocks lived.
Understand:	Summarize what the Goldilocks story was about.
Apply:	Construct a theory as to why Goldilocks went into the house.
Analyze:	Differentiate between how Goldilocks reacted and how you would react in each story event.
Evaluate:	Assess whether or not you think this really happened to Goldilocks.
Create:	Compose a song, skit, poem, or rap to convey the Goldilocks story in a new form.

Although this is a very simple example of the application of Bloom's taxonomy the author is hopeful that it will demonstrate both the ease and the usefulness of the Revised Taxonomy Table.

PURPOSE

To apply Bloom's theory of developing higher levels of thought processes to everyday classroom reading.

EXPLANATION

Many students are directed to read narrative or expository selections for classroom assignments for the purpose of answering factual questions. This type of reading for literal comprehension is often emphasized because of the ease and equity of evaluation.

The emphasis is limiting because many students do not develop a personal attachment to books they read. They do not see reading as a bridge to their imaginations, a way to understand how others live their lives, or a method to gain self-understanding and evaluation.

Questions that teachers ask can direct the students to the realization that reading has a greater and more diverse purpose than just the simple recall of facts. If this can be accomplished, it is likely that students will place a higher value on reading, continue to turn to it for pleasure and as a resource, and will establish it as a life-long habit.

PROCEDURE

For any assigned reading selection, develop questions that reflect the progression of thinking and responding from the literal level to the evaluative. Not all levels need to be developed for every selection. Consider a range that will lead the student to the greater purpose of reading.

Each level of Bloom's original taxonomy has been restated for clarity and simplification. Examples of appropriate questions or directives are given to illustrate each level. The story of *Goldilocks and the Three Bears* was used for general understanding.

<p>Knowledge</p>	<p><i>the recall of specific information</i></p> <p>Who was Goldilocks? Where did she live? With whom? What did her mother tell her not to do?</p>
<p>Comprehension</p>	<p><i>an understanding of what was read</i></p> <p>This story was about _____. (Topic) The story tells us _____. (Main Idea) Why didn't her mother want her to go to the forest? What did Goldilocks look like? What kind of girl was she?</p>
<p>Application</p>	<p><i>the converting of abstract content to concrete situations</i></p> <p>How were the bears like real people? Why did Goldilocks go into the little house? Write a sign that should be placed near the edge of the forest. Draw a picture of what the bear's house looked like. Draw a map showing Goldilocks' house, the path in the forest, the bear's house, etc. Show through action how Goldilocks sat in the chairs, ate the porridge, etc.</p>
<p>Analysis</p>	<p><i>the comparison and contrast of the content to personal experiences</i></p> <p>How did each bear react to what Goldilocks did? How would you react? Compare Goldilocks to any friend. Do you know any animals (pets) that act human? When did Goldilocks leave her real world for fantasy? How do</p>

	<p>you know?</p>
<p>Synthesis</p>	<p><i>the organization of thoughts, ideas, and information from the content</i></p> <p>List the events of the story in sequence.</p> <p>Point out the importance of time sequence words by asking: What happened after Goldilocks ate the Baby Bear's porridge? What happened before Goldilocks went into the forest? What is the first thing she did when she went into the house?</p> <p>Draw a cartoon or stories about bears. Do they all act like humans?</p> <p>Do you know any other stories about little girls or boys who escaped from danger?</p> <p>Make a puppet out of one of the characters. Using the puppet, act out his/her part in the story.</p> <p>Make a diorama of the bear's house and the forest.</p>
<p>Evaluation</p>	<p><i>the judgment and evaluation of characters, actions, outcome, etc., for personal reflection and understanding</i></p> <p>Why were the bear's angry with Goldilocks?</p> <p>Why was Goldilocks happy to get home?</p> <p>What do you think she learned by going into that house?</p> <p>Do you think she will listen to her mother's warnings in the future? Why?</p> <p>Do parents have more experience and background than their children?</p> <p>Would you have gone in the bear's house? Why or why not?</p> <p>Do you think this really happened to Goldilocks? Why?</p> <p>Why would a grown-up write this story for children to read?</p> <p>Why has the story of Goldilocks been told to children for many, many years?</p>